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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,963	09/04/2002	Johannes Kuentler	200-1212	7007

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EXAMINER

TRAN, BINH Q

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 09/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,963

Applicant(s)

KUENSTLER ET AL.

Examiner

BINH Q. TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-12 and 14-20 is/are rejected.
- 7) ☒ Claim(s) 4 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This office action is in response to the amendment filed June 30, 2003.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1, 6-14, and 17-20 are rejected under 35 U.S.C. 102 (b) as being anticipated by Matsuoka et al. (Matsuoka) (Patent Number 5,848,530).

Regarding claims 1, 9-11, and 17-18, Matsuoka discloses a method and apparatus for controlling the starting of an internal combustion engine (1) an exhaust aftertreatment device (3) with a minimal threshold temperature for proper operation, the method comprising: increasing an electrical load on an electrical generator (e.g. 9) that is driven by the engine (1) (e.g. See Fig. 2); and throttling an air intake of the engine to reduce an intake manifold pressure to a target pressure, wherein the method is performed within a predetermined time period after engine start (e.g. See col. 10, lines 15-67; col. 11, lines 1-5).

Regarding claims 6 and 14, Matsuoka further disclose that the throttling is discontinued when a gas temperature downstream of the aftertreatment device is below a threshold temperature (e.g. See col. 10, lines 15-67; col. 11, lines 1-5).

Regarding claim 7, Matsuoka further disclose the discontinuing said increasing and said throttling when an exhaust gas temperature downstream of the aftertreatment device is greater than said threshold temperature for proper operation of the aftertreatment device (e.g. See col. 10, lines 15-67; col. 11, lines 1-5).

Regarding claim 8, Matsuoka further disclose that the increasing the electrical load and said throttling are carried out only when a temperature of the engine is within a predetermined temperature interval (e.g. See col. 10, lines 15-67; col. 11, lines 1-5).

Regarding claim 19, Matsuoka further disclose that the increasing and said closing are performed with a predetermined time period after the engine is started (e.g. See col. 10, lines 15-67; col. 11, lines 1-5).

Regarding claims 12, and 20, Matsuoka further disclose that the diesel engine aftertreatment device is an oxidation catalyst (3) having a minimum threshold temperature for proper operation (e.g. See col. 10, lines 15-67; col. 11, lines 1-5).

Claims 1, 3, 8-12, and 17-20 are rejected under 35 U.S.C. 102 (b) as being anticipated by Yoshizaki et al. (Yoshizaki) (Patent Number 5,966,931).

Regarding claims 1, 9-11, and 17-18, Yoshizaki discloses a method for controlling the starting of an internal combustion engine (1) an exhaust aftertreatment device (e.g. 10, 15) with a

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minimal threshold temperature for proper operation, the method comprising: increasing an electrical load on an electrical generator (e.g. 60) that is driven by the engine (e.g. See col. 5, lines 33-67); and throttling an air intake of the engine to reduce an intake manifold pressure to a target pressure, wherein the method is performed within a predetermined time period after engine start (e.g. See col. 11, lines 24-40).

Regarding claim 3, Yoshizaki further disclose that the electrical load of said generator comprises an electrical heater (11).

Regarding claim 8, Yoshizaki further disclose that the increasing the electrical load and said throttling are carried out only when a temperature of the engine is within a predetermined temperature interval (e.g. See col. 11, lines 24-40).

Regarding claim 19, Yoshizaki further disclose that the increasing and said closing are performed with a predetermined time period after the engine is started (e.g. See col. 11, lines 24-40).

Regarding claims 12, and 20, Yoshizaki further disclose that the diesel engine aftertreatment device is an oxidation catalyst (e.g 10, 15) having a minimum threshold temperature for proper operation (e.g. See col. 11, lines 24-40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over both Matsuoka and Yoshizaki in view of Taniguchi (Patent Number 5,716,586).

Regarding claims 2, and 15-16, both Matsuoka and Yoshizaki discloses all the claimed limitation as discussed above except that the electrical load of said generator comprises at least one glow plug disposed in the engine.

Taniguchi teaches that it is conventional in the art, to use at least one glow plug disposed in the engine for controlling electrical load of the generator of the engine (See col. 21, lines 10-61).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to use at least one glow plug disposed in the engine for controlling electrical load of the generator of the engine of both Matsuoka and Yoshizaki, as taught by Taniguchi for the purpose of controlling the temperature of the catalytic converter during warming up, so as to further reduce emissions in the exhaust gas of the internal combustion engine, and improve the performance and the efficiency of the emission device.

Allowable Subject Matter

Claims 4, and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Since allowable subject matter has been indicated, applicant is encouraged to submit formal drawings in response to this Office action. The early submission of formal drawings will permit the Office to review the drawings for acceptability and to resolve any informalities remaining therein before the application is passed to issue. This will avoid possible delays in the issue process.

Response to Arguments

Applicant's arguments filed June 30, 2003 have been fully considered but they are not completely persuasive. ***Claims 1-4, and 6-20 are pending.***

Applicant's cooperation in correcting the informalities in the specification is appreciated. Applicant's cooperation in explaining the claims subject matter more specific to overcome the claim objections relating to indefinite claim language is also appreciated.

Applicants' s arguments with respect to claims 1-4, and 6-20 have been considered but are moot in view of the new ground(s) of rejection as discussed above.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of one patents:

Harada (Patent Number 5553451) all discloses an exhaust gas purification for use with an internal combustion engine.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (703) 305-0245. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (703) 308-2623. The fax phone number for this group is (703) 746-4561.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.



BT
September 04, 2003

Binh Tran
Patent Examiner
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